

Development Economics

Key questions (2)

Read Ray (1998) pp403-436 and answer the following questions regarding land tenancy.

1. Alfred Marshall claimed that sharecropping was essentially an inferior system to that of fixed-rent tenancy. Explain his argument (about 9-10 lines, or fewer lines if you use a diagram or diagrams).

2. Agricultural production is typically influenced by uncertainties such as bad weather and outbreaks of insect pests. Let's suppose that two levels of agricultural output are possible. The value of each state is denoted by G for the good state and B for the bad state, respectively, where $G > B$. The probability of G is given by p and the probability of B is given by $1 - p$. A landlord plans to lease her land to a tenant. Two types of tenancy contracts are possible. For the fixed-rent tenancy, the landlord charges R on the tenant no matter how much crop yields the tenant produces. For the sharecropping tenancy, the tenant gives the share s of output to the landlord and keeps the remaining share $(1-s)$ of output for himself. Suppose the landlord is risk neutral.
 - i) Suppose that the landlord is indifferent between the fixed-rent tenancy and the sharecropping tenancy. Give s in terms of R , G , B , and p .
 - ii) Given the particular s you found in i), determine under which tenancy (either the fixed-rent tenancy or the sharecropping tenancy) the value of the tenant's share is larger in each state (G and B). Justify your answer.
 - iii) Suppose the tenant is risk-averse. Given the particular s you found in i), which tenancy does the tenant prefer? Justify your answer (about 5-6 lines).

3. Despite Marshall's argument in 1 above, sharecropping is prevalent in developing countries, especially in Asia. Explain a possible reason. (This question is in essence the same as the question 2 above. Here, I want you

to explain the logic in words.) (about 10-11 lines)

4. (Challenging Question) In Latin American countries, land tenancy is largely in the form of fixed rent, whereas Asian tenancy is characterized by a high incidence of sharecropping. Where does the difference come from? (Hint: When you consider land tenancy, you should keep the following two key concepts in your mind: work incentives and crop risk. Given the scale of farming in each area, which of the two problems, work incentives or crop risk, seems easier to alleviate? As a result, do many land tenancies in each area flow from relatively rich farmers to relatively poor farmers, or the other way around? It is reasonable to assume that relatively rich farmers are less risk averse than relatively poor farmers.) (about 25 lines)